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Sequence Listing was accepted.

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217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2008; month=10; day=15; hr=12; min=16; sec=2; ms=256;]

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Application No: 10520026 Version No: 1.0

Input Set:**Output Set:**

Started: 2008-10-14 13:13:06.739
Finished: 2008-10-14 13:13:10.250
Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 511 ms
Total Warnings: 137
Total Errors: 0
No. of SeqIDs Defined: 137
Actual SeqID Count: 137

Error code	Error Description
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W 402	Undefined organism found in <213> in SEQ ID (2)
W 402	Undefined organism found in <213> in SEQ ID (3)
W 402	Undefined organism found in <213> in SEQ ID (4)
W 402	Undefined organism found in <213> in SEQ ID (5)
W 402	Undefined organism found in <213> in SEQ ID (6)
W 402	Undefined organism found in <213> in SEQ ID (7)
W 402	Undefined organism found in <213> in SEQ ID (8)
W 402	Undefined organism found in <213> in SEQ ID (9)
W 402	Undefined organism found in <213> in SEQ ID (10)
W 402	Undefined organism found in <213> in SEQ ID (11)
W 402	Undefined organism found in <213> in SEQ ID (12)
W 402	Undefined organism found in <213> in SEQ ID (13)
W 402	Undefined organism found in <213> in SEQ ID (14)
W 402	Undefined organism found in <213> in SEQ ID (15)
W 402	Undefined organism found in <213> in SEQ ID (16)
W 402	Undefined organism found in <213> in SEQ ID (17)
W 402	Undefined organism found in <213> in SEQ ID (18)
W 402	Undefined organism found in <213> in SEQ ID (19)
W 402	Undefined organism found in <213> in SEQ ID (20)

Input Set:

Output Set:

Started: 2008-10-14 13:13:06.739
Finished: 2008-10-14 13:13:10.250
Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 511 ms
Total Warnings: 137
Total Errors: 0
No. of SeqIDs Defined: 137
Actual SeqID Count: 137

Error code	Error Description
	This error has occurred more than 20 times, will not be displayed
W 213	Artificial or Unknown found in <213> in SEQ ID (29)
W 213	Artificial or Unknown found in <213> in SEQ ID (30)
W 213	Artificial or Unknown found in <213> in SEQ ID (31)
W 213	Artificial or Unknown found in <213> in SEQ ID (32)
W 213	Artificial or Unknown found in <213> in SEQ ID (33)
W 213	Artificial or Unknown found in <213> in SEQ ID (34)

SEQUENCE LISTING

<110> Zhu, Zhenping

<120> Bispecific Antibodies That Bind to VEGF Receptors

<130> 11245/48503

<140> 10520026

<141> 2008-10-14

<150> PCT/US02/041372

<151> 2002-12-24

<150> PCT/US02/20332

<151> 2002-06-26

<150> US 60/301,299

<151> 2001-06-26

<160> 137

<170> WordPerfect 8.0 for Windows

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<211> 10

<212> PRT

<213> Mouse

<400> 1

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<210> 2

<211> 17

<212> PRT

<213> Mouse

<400> 2

Trp	Ile	Asp	Pro	Glu	Asn	Gly	Asp	Ser	Gly	Tyr	Ala	Pro	Lys	Phe	Gln	Gly
1				5					10					15		

<210> 3

<211> 8

<212> PRT

<213> Mouse

<400> 3

Tyr	Tyr	Gly	Asp	Tyr	Glu	Gly	Tyr
1				5			

<210> 4

<211> 10

<212> PRT
<213> Mouse

<400> 4

Ser Ala Ser Ser Ser Val Ser Tyr Met His
1 5 10

<210> 5

<211> 7

<212> PRT

<213> Mouse

<400> 5

Ser Thr Ser Asn Leu Ala Ser
1 5

<210> 6

<211> 9

<212> PRT

<213> Mouse

<400> 6

Gln Gln Arg Ser Ser Tyr Pro Phe Thr
1 5

<210> 7

<211> 117

<212> PRT

<213> Mouse

<400> 7

Gln Val Lys Leu Gln Gln Ser Gly Ala Glu Leu Val Gly Ser Gly Ala
1 5 10 15
Ser Val Lys Leu Ser Cys Thr Thr Ser Gly Phe Asn Ile Lys Asp Phe
20 25 30
Tyr Met His Trp Val Lys Gln Arg Pro Glu Gln Gly Leu Glu Trp Ile
35 40 45
Gly Trp Ile Asp Pro Glu Asn Gly Asp Ser Gly Tyr Ala Pro Lys Phe
50 55 60
Gln Gly Lys Ala Thr Met Thr Ala Asp Ser Ser Ser Asn Thr Ala Tyr
65 70 75 80
Leu Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Asn Ala Tyr Tyr Gly Asp Tyr Glu Gly Tyr Trp Gly Gln Gly Thr Thr
100 105 110
Val Thr Val Ser Ser
115

<210> 8

<211> 108

<212> PRT

<213> Mouse

<400> 8

Asp Ile Glu Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
 1 5 10 15
 Glu Lys Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
 20 25 30
 His Trp Phe Gln Gln Lys Pro Gly Thr Ser Pro Lys Leu Trp Ile Tyr
 35 40 45
 Ser Thr Ser Asn Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
 50 55 60
 Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Met Glu Ala Glu
 65 70 75 80
 Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Arg Ser Ser Tyr Pro Phe Thr
 85 90 95
 Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg Ala
 100 105

<210> 9

<211> 30

<212> DNA

<213> Mouse

<400> 9

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 Gly Phe Asn Ile Lys Asp Phe Tyr Met His
 1 5 10

<210> 10

<211> 51

<212> DNA

<213> Mouse

<400> 10

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 1 5 10 15
 ggc 51

<210> 11

<211> 24

<212> DNA

<213> Mouse

<400> 11

tac tat ggt gac tac gaa ggc tac 24
 Tyr Tyr Gly Asp Tyr Glu Gly Tyr
 1 5

<210> 12

<211> 30

<212> DNA

<213> Mouse

<400> 12

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Ser Ala Ser Ser Ser Val Ser Tyr Met His	
1 5 10	
<210> 13	
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<213> Mouse	
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Ser Thr Ser Asn Leu Ala Ser	
1 5	
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<211> 27	
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<213> Mouse	
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1 5	
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<211> 351	
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<213> Mouse	
<400> 15	
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tca gtc aaa ttg tcc tgc aca act tct ggc ttc aac att aaa gac ttc	96
Ser Val Lys Leu Ser Cys Thr Thr Ser Gly Phe Asn Ile Lys Asp Phe	
20 25 30	
tat atg cac tgg gtg aag cag agg cct gaa cag ggc ctg gag tgg att	144
Tyr Met His Trp Val Lys Gln Arg Pro Glu Gln Gly Leu Glu Trp Ile	
35 40 45	
gga tgg att gat cct gag aat ggt gat tct ggt tat gcc ccg aag ttc	192
Gly Trp Ile Asp Pro Glu Asn Gly Asp Ser Gly Tyr Ala Pro Lys Phe	
50 55 60	
cag ggc aag gcc acc atg act gca gac tca tcc tcc aac aca gcc tac	240
Gln Gly Lys Ala Thr Met Thr Ala Asp Ser Ser Ser Asn Thr Ala Tyr	
65 70 75 80	
ctg cag ctc agc agc ctg aca tct gag gac act gcc gtc tat tac tgt	288
Leu Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys	
85 90 95	
aat gca tac tat ggt gac tac gaa ggc tac tgg ggc caa ggg acc acg	336
Asn Ala Tyr Tyr Gly Asp Tyr Glu Gly Tyr Trp Gly Gln Gly Thr Thr	
100 105 110	
gtc acc gtc tcc tca	351
Val Thr Val Ser Ser	
115	

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<211> 324
<212> DNA
<213> Mouse

<400> 16

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  1             5             10             15
gag aag gtc acc ata acc tgc agt gcc agc tca agt gta agt tac atg      96
Glu Lys Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
             20             25             30
cac tgg ttc cag cag aag cca ggc act tct ccc aaa ctc tgg att tat     144
His Trp Phe Gln Gln Lys Pro Gly Thr Ser Pro Lys Leu Trp Ile Tyr
             35             40             45
agc aca tcc aac ctg gct tct gga gtc cct gct cgc ttc agt ggc agt     192
Ser Thr Ser Asn Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
             50             55             60
gga tct ggg acc tct tac tct ctc aca atc agc cga atg gag gct gaa     240
Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Met Glu Ala Glu
             65             70             75             80
gat gct gcc act tat tac tgc cag caa agg agt agt tac cca ttc acg     288
Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Arg Ser Ser Tyr Pro Phe Thr
             85             90             95
ttc ggc tcg ggg acc aag ctg gaa ata aaa cgg gcg                      324
Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg Ala
             100             105
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<210> 17
<211> 15
<212> PRT
<213> Mouse

<400> 17

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Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
  1             5             10             15
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<210> 18
<211> 45
<212> DNA
<213> Mouse

<400> 18

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ggcggaggcg gttcaggcgg aggtggctct ggcggcggcg gatcg                      45
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<210> 19
<211> 10
<212> PRT
<213> Mouse

<400> 19

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Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
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1 5 10

<210> 20

<211> 15

<212> DNA

<213> Mouse

<400> 20

ggtaggagcg gttca 15

<210> 21

<211> 17

<212> PRT

<213> Mouse

<400> 21

Trp Ile Asp Pro Glu Asn Gly Asp Ser Asp Tyr Ala Pro Lys Phe Gln Gly

1 5 10 15

<210> 22

<211> 117

<212> PRT

<213> Mouse

<400> 22

Gln Val Lys Leu Gln Gln Ser Gly Ala Glu Leu Val Gly Ser Gly Ala

1 5 10 15

Ser Val Lys Leu Ser Cys Thr Thr Ser Gly Phe Asn Ile Lys Asp Phe

20 25 30

Tyr Met His Trp Val Lys Gln Arg Pro Glu Gln Gly Leu Glu Trp Ile

35 40 45

Gly Trp Ile Asp Pro Glu Asn Gly Asp Ser Asp Tyr Ala Pro Lys Phe

50 55 60

Gln Gly Lys Ala Thr Met Thr Ala Asp Ser Ser Ser Asn Thr Ala Tyr

65 70 75 80

Leu Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys

85 90 95

Asn Ala Tyr Tyr Gly Asp Tyr Glu Gly Tyr Trp Gly Gln Gly Thr Thr

100 105 110

Val Thr Val Ser Ser

115

<210> 23

<211> 106

<212> PRT

<213> Mouse

<400> 23

Asp Ile Glu Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly

1 5 10 15

Glu Lys Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met

20 25 30

His Trp Phe Gln Gln Lys Pro Gly Thr Ser Pro Lys Leu Trp Ile Tyr
 35 40 45
 Ser Thr Ser Asn Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
 50 55 60
 Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Met Glu Ala Glu
 65 70 75 80
 Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Arg Ser Ser Tyr Pro Phe Thr
 85 90 95
 Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
 100 105

<210> 24
 <211> 51
 <212> DNA
 <213> Mouse

<400> 24

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<210> 25
 <211> 351
 <212> DNA
 <213> Mouse

<400> 25

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 1 5 10 15
 tca gtc aaa ttg tcc tgc aca act tct ggc ttc aac att aaa gac ttc 96
 Ser Val Lys Leu Ser Cys Thr Thr Ser Gly Phe Asn Ile Lys Asp Phe
 20 25 30
 tat atg cac tgg gtg aag cag agg cct gaa cag ggc ctg gag tgg att 144
 Tyr Met His Trp Val Lys Gln Arg Pro Glu Gln Gly Leu Glu Trp Ile
 35 40 45
 gga tgg att gat cct gag aat ggt gat tct gat tat gcc ccg aag ttc 192
 Gly Trp Ile Asp Pro Glu Asn Gly Asp Ser Asp Tyr Ala Pro Lys Phe
 50 55 60
 cag ggc aag gcc acc atg act gca gac tca tcc tcc aac aca gcc tac 240
 Gln Gly Lys Ala Thr Met Thr Ala Asp Ser Ser Ser Asn Thr Ala Tyr
 65 70 75 80
 ctg cag ctc agc agc ctg aca tct gag gac act gcc gtc tat tac tgt 288
 Leu Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 aat gca tac tat ggt gac tac gaa ggc tac tgg ggc caa ggg acc acg 336
 Asn Ala Tyr Tyr Gly Asp Tyr Glu Gly Tyr Trp Gly Gln Gly Thr Thr
 100 105 110
 gtc acc gtc tcc tca 351
 Val Thr Val Ser Ser
 115

<210> 26
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 <212> DNA
 <213> Mouse

<400> 26

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Asp Ile Glu Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
  1             5             10             15
gag aag gtc acc ata acc tgc agt gcc agc tca agt gta agt tac atg      96
Glu Lys Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
          20          25          30
cac tgg ttc cag cag aag cca ggc act tct ccc aaa ctc tgg att tat      144
His Trp Phe Gln Gln Lys Pro Gly Thr Ser Pro Lys Leu Trp Ile Tyr
          35          40          45
agc aca tcc aac ctg gct tct gga gtc cct gct cgc ttc agt ggc agt      192
Ser Thr Ser Asn Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
          50          55          60
gga tct ggg acc tct tac tct ctc aca atc agc cga atg gag gct gaa      240
Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Met Glu Ala Glu
          65          70          75          80
gat gct gcc act tat tac tgc cag caa agg agt agt tac cca ttc acg      288
Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Arg Ser Ser Tyr Pro Phe Thr
          85          90          95
ttc ggc tcg ggg acc aag ctg gaa ata aaa                                318
Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
          100          105
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<210> 27

<211> 240

<212> PRT

<213> Mouse

<400> 27

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          20          25          30
Tyr Met His Trp Val Lys Gln Arg Pro Glu Gln Gly Leu Glu Trp Ile
          35          40          45
Gly Trp Ile Asp Pro Glu Asn Gly Asp Ser Gly Tyr Ala Pro Lys Phe
          50          55          60
Gln Gly Lys Ala Thr Met Thr Ala Asp Ser Ser Asn Thr Ala Tyr
          65          70          75          80
Leu Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys
          85          90          95
Asn Ala Tyr Tyr Gly Asp Tyr Glu Gly Tyr Trp Gly Gln Gly Thr Thr
          100          105          110
Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
          115          120          125
Gly Gly Gly Ser Asp Ile Glu Leu Thr Gln Ser Pro Ala Ile Met Ser
          130          135          140
Ala Ser Pro Gly Glu Lys Val Thr Ile Thr Cys Ser Ala Ser Ser Ser
          145          150          155          160
Val Ser Tyr Met His Trp Phe Gln Gln Lys Pro Gly Thr Ser Pro Lys
          165          170          175
Leu Trp Ile Tyr Ser Thr Ser Asn Leu Ala Ser Gly Val Pro Ala Arg
          180          185          190
Phe Ser Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg
          195          200          205
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210						215					220				
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<210> 28
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 <212> PRT
 <213> Mouse

<400> 28

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Ser	Val	Lys	Leu	Ser	Cys	Thr	Thr	Ser	Gly	Phe	Asn	Ile	Lys	Asp	Phe
			20					25					30		
Tyr	Met	His	Trp	Val	Lys	Gln	Arg	Pro	Glu	Gln	Gly	Leu	Glu	Trp	Ile
		35					40					45			
Gly	Trp	Ile	Asp	Pro	Glu	Asn	Gly	Asp	Ser	Asp	Tyr	Ala	Pro	Lys	Phe
	50					55					60				
Gln	Gly	Lys	Ala	Thr	Met	Thr	Ala	Asp	Ser	Ser	Ser	Asn	Thr	Ala	Tyr
65					70					75					80
Leu	Gln	Leu	Ser	Ser	Leu	Thr	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85					90					95	
Asn	Ala	Tyr	Tyr	Gly	Asp	Tyr	Glu	Gly	Tyr	Trp	Gly	Gln	Gly	Thr	Thr
		100					105					110			
Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly
		115				120						125			
Gly	Gly	Gly	Ser	Asp	Ile	Glu	Leu	Thr	Gln	Ser	Pro	Ala	Ile	Met	Ser
	130					135					140				
Ala	Ser	Pro	Gly	Glu	Lys	Val	Thr	Ile	Thr	Cys	Ser	Ala	Ser	Ser	Ser
145					150					155					160
Val	Ser	Tyr	Met	His	Trp	Phe	Gln	Gln	Lys	Pro	Gly	Thr	Ser	Pro	Lys
			165						170					175	
Leu	Trp	Ile	Tyr	Ser	Thr	Ser	Asn	Leu	Ala	Ser	Gly	Val	Pro	Ala	Arg
		180					185					190			
Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Ser	Tyr	Ser	Leu	Thr	Ile	Ser	Arg
		195				200						205			
Met	Glu	Ala	Glu	Asp	Ala	Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	Arg	Ser	Ser
	210					215					220				
Tyr	Pro	Phe	Thr	Phe	Gly	Ser	Gly	Thr	Lys	Leu	Glu	Ile	Lys		
225					230					235					

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<210> 30
 <211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic primer

<400> 30

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<210> 31

<211> 52

<212> DNA

<213> Artificial Sequence

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<223> Synthetic primer

<400> 31

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<210> 32

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> Signal

<400> 32

tcgatctaga aggatccact cacgttttat ttccag 36

<210> 33

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> leader peptide

<400> 33

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly

5

10

15

Val His Ser

<210> 34

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic primer

<400> 34

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32

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